

ABSTRACT OF THE DISCLOSURE

The invention is directed to a controlled environment processing chamber into which solvents, water and/or gases can be introduced for cleaning of an object. The process includes first applying a negative gauge pressure to the chamber to non-condensable gases and then introducing a solvent, solvent mixture, water or gas in either a liquid or vapor state to remove soluble contaminants from the surface of an object being processed in the chamber. Further steps recover residual solvent or solution from the object and chamber. A secondary cleaning step directs a vapor state fluid at high velocity at a solid surface of the object to remove insoluble material left behind after the pretreatment step. A final series of steps recovers any loose impediments or residual liquid or vapor from the chamber and returns the chamber to atmospheric pressure for removal of the cleaned object.